PUBLIC HEALTH Bulletin

Department of Health and Human Services

VOLUME 5 • ISSUE 8 DATA FOR WINTER 2002

The mission of the City of Long Beach Department of Health and Human Services is to improve the quality of life of the residents of Long Beach by addressing the public health and human service needs ensuring that the conditions affecting the public's health afford a healthy environment in which to live, work and play.

table of contents

City of Long Beach Department Of Health And Human Services Smallpox: Frequently Asked Questions

On December 13, 2002, President George W. Bush announced a plan to better protect the American people against the threat of a smallpox attack by hostile groups or governments. Although there is no reason to believe that smallpox presents an imminent threat, in the aftermath of the events of September and October 2001, the United States government is taking precautions to be ready to deal with a bioterrorist attack using smallpox as a weapon. Concerns over the potential use of biological agents as weapons have heightened our awareness of the possibility of such an attack.

The Federal Government's Vaccination Plan

President Bush also announced that the Department of Defense (DOD) will vaccinate certain military and civilian personnel who will or may be deployed in high threat areas (CDC, 2002). To date, the Federal government's smallpox vaccination plan is as follows.

Phase I: This phase of the plan offers voluntary vaccination to public health response teams and designated hospital smallpox response teams. The purpose is to immunize those most likely to be exposed to the virus by an infected smallpox patient, to vaccinate and teach vaccination to health care workers. Phase I will begin in early 2003.

Phase II: This phase, if activated as currently drafted, would expand the number of people vaccinated to include additional "first responders," such as fire fighters, law enforcement officers, emergency medical service personal, and other health care providers.

Phase III: This phase, if activated as currently drafted, would provide vaccines on a voluntary basis to the general public.

According to the President's announcement, the United States currently has sufficient quantities of the smallpox vaccine to vaccinate every single person in the county in an emergency.

Edward Jenner (1749-1823) who developed the process of producing immunity of smallpox inoculation with cowpox vaccine.

The History of Smallpox

Smallpox is an acute contagious disease caused by variola virus, a member of the orthopoxvirus family.

Continued on page 2

HIV/AIDS Information

California AIDS Multilingual Hotline
800-922-AIDS

CDC National HIV/AIDS Hotline
800-243-7889

The City of Long Beach AIDS Surveillance Program also publishes an HIV/AIDS Monitoring Report that contains additional data about AIDS in Long Beach. For more information, call (562) 570-4311.

Communicable Disease Report

Selected Reportable Diseases for the City of Long Beach

Disease	December 2002	YTD 2002	December 2001	YTD 2001
AIDS	26	301	18	198
AMEBIASIS	2	13	0	6
CAMPYLOBACTERIOSIS	4	62	4	52
CHLAMYDIAL INFECTIONS	184	2,040	169	2,119
GIARDIASIS	4	36	4	58
GONORRHEA	56	565	67	638
H. INFLUENZAE	0	1	1	0
HEPATITIS A	0	28	1	27
HEPATITIS B, acute	1	12	1	14
HEPATITIS C, acute	0	1	0	0
MEASLES	0	1	0	0
MENINGITIS, viral (aseptic)	3	61	5	57
MENINGOCOCCAL INFECTIONS	0	2	0	10
NON-GONOCOCCAL URETHRITIS (NGU)	7	131	10	98
PERTUSSIS	0	2	0	1
RUBELLA	0	1	0	0
SALMONELLOSIS	2	33	1	47
SHIGELLOSIS	4	57	3	45
SYPHILIS, primary and secondary *	3	37	0	19
SYPHILIS, EARLY LATENT (<1 year) *	2	19	1	13
TUBERCULOSIS	9	59	5	50

* Numbers provisional until investigation is completed.

Sources: City of Long Beach Department of Health and Human Services, Epidemiology Program; Tuberculosis Program; HIV/AIDS Epidemiology Program. California Department of Health Services, STD Control Branch.

City of Long Beach Department Of Health And Human Services Smallpox: Frequently Asked Questions

Continued from page 1

Believed to have originated over 3,000 years ago, smallpox is one of the most devastating diseases known to humanity. For centuries, repeated epidemics swept across continents, decimating populations and changing the course of history. In 18th century Europe, a third of all reported cases of blindness were due to smallpox. In a survey conducted in Vietnam in 1898, 95% of adolescent children were pockmarked and nine-tenths of all blindness was ascribed to smallpox. As late as the 18th century, smallpox killed every 10th child born in Sweden and France. During the same century, every 7th child born in Russia died from smallpox.

In 1796, the English physician Edward Jenner first showed that inoculating a healthy individual with infected material from a mild infection called cowpox (vaccinia) conferred immunity to smallpox; hence the term "vaccination." So started a sequence of events that eventually led to a huge international eradication effort coordinated by the World Health Organization (WHO).

Through the success of this global eradication campaign, smallpox was significantly reduced in Africa, and the last natural case occurred in Somalia in 1977. A fatal laboratory-acquired case occurred in the United Kingdom in 1978. The global eradication of smallpox was certified, based on intense verification activities in countries, by a commission of eminent scientists in December 1979 and subsequently endorsed by the World Health Assembly in 1980.

Continued on page 3

AIDS Surveillance Program Data

City of Long Beach Data as of December 31, 2002

4,341 Total Long Beach City AIDS Cases	**(2,445 deceased - 56% Mortality Rate)**
4,332 Adult Cases	(2,439 deceased - 56% Mortality Rate)
9 Pediatric Cases	(6 deceased - 67% Mortality Rate)

AIDS Cases by Gender

	#	%
Male	4,072	94
Female	269	6

AIDS Cases by Race/Ethnicity

	#	%
White, Not Hispanic	2,682	62
Black, Not Hispanic	755	17
Hispanic	813	19
Asian/Pacific Islander	78	<2
American Indian/Alaskan	11	<1
Unknown	2	<1

AIDS Cases by Exposure Category

	#	%
Male-to-Male contact	3,276	75
Intravenous Drug Use	372	9
Male-to-Male Contact and Intravenous Drug Use	369	9
Heterosexual Contact	211	5
Recipient of Blood/Blood Products Transfusion	25	<1
Hemophilia/Coagulation Disorder	14	<1
Mother at Risk (Perinatal Exposure)	8	<1
Risk Not Reported/Other	66	<2

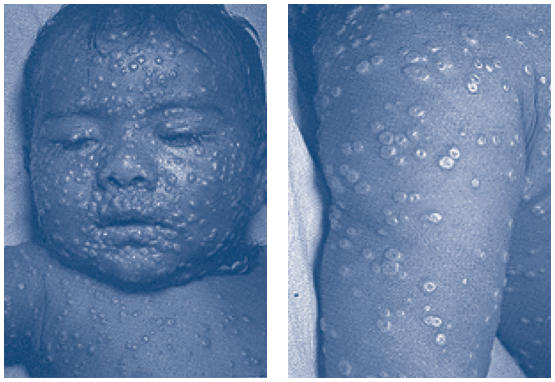
City of Long Beach Department Of Health And Human Services Smallpox: Frequently Asked Questions

Continued from page 2

Smallpox - The Disease

What is smallpox?

Smallpox is an acute, contagious and sometimes fatal disease caused by the variola virus (an orthopoxvirus), and is marked by fever and a distinctive progressive skin rash. The rash starts out as red spots that enlarge, become pus-filled (pustule) and then scab, and fall off after about three weeks, leaving a pitted scar (see table below for more detail). Other symptoms include lack of energy, headache, backache, and vomiting.



Seventh Day of Rash

Continued on page 4

Health Department Contact Information

❖

General Information
(562) 570-4000
www.ci.long-beach.ca.us/health

Alcohol/Drug Rehabilitation
(562) 570-4100

Animal Control Shelter
(562) 570-7387

Early Intervention Program/
HIV Testing/STD Clinic
(562) 570-4315

Environmental Health
(562) 570-4132

Immunizations/Walk-In Clinic
(562) 570-4222

Prenatal Clinic
(562) 570-4217

Senior Center
(562) 570-3531

Tobacco Education Program
(562) 570-8508

WIC Program
(562) 570-4242

The
Public Health Bulletin
is published as a public health service to interested City of Long Beach residents by the Department of Health and Human Services
2525 Grand Avenue
Long Beach, CA 90815
(562) 570-4000
www.ci.long-beach.ca.us/health

❖

To be added or removed from the mailing list, please contact Hanan Obeidi at (562) 570-4382 or email hanan_obeidi@ci.long-beach.ca.us.

❖

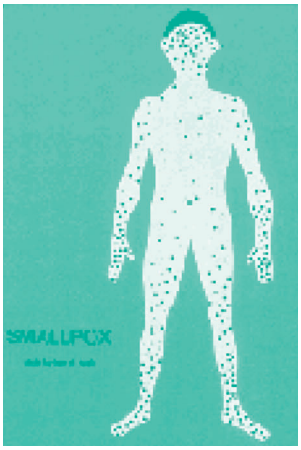
This information is available in an alternative format.

❖

Data contained in this publication are considered provisional due to reporting delays.

Continued from page 3

Smallpox Disease

Incubation Period (Duration: 7 to 17 days) ***Not contagious***	**Exposure to the virus** is followed by an incubation period during which people do not have any symptoms and may feel fine. This incubation period averages about 12 to 14 days but can range from 7 to 17 days. During this time, people are not contagious.
Initial Symptoms (Prodrome) (Duration: 2 to 4 days) ***Sometimes contagious****	The **first symptoms** of smallpox include fever, malaise, head and body aches, and sometimes vomiting. The fever is usually high, in the range of 101 to 104 degrees Fahrenheit. At this time, people are usually too sick to carry on their normal activities. This is called the prodrome phase and may last for 2 to 4 days.
Early Rash (Duration: about 4 days) ***Most contagious*** Rash distribution:  	A **rash emerges** first as small red spots on the tongue and in the mouth. These spots develop into sores that break open and spread large amounts of the virus into the mouth and throat. At this time, the person becomes **most contagious**. Around the time the sores in the mouth break down, a rash appears on the skin, starting on the face and spreading to the arms and legs and then to the hands and feet. Usually the rash spreads to all parts of the body within 24 hours. As the rash appears, the fever usually falls and the person may start to feel better. By the third day of the rash, the rash becomes raised bumps. By the fourth day, the bumps fill with a thick, opaque fluid and often have a depression in the center that looks like a bellybutton. (This is a major distinguishing characteristic of smallpox.) Fever often will rise again at this time and remain high until scabs form over the bumps.
Pustular Rash (Duration: about 5 days) ***Contagious***	The bumps become **pustules** – sharply raised, usually round and firm to the touch as if there's a small round object under the skin. People often say the bumps feel like BB pellets embedded in the skin.
Pustules and Scabs (Duration: about 5 days) ***Contagious***	The pustules begin to form a crust and then **scab**. By the end of the second week after the rash appears, most of the sores have scabbed over.
Resolving Scabs (Duration: about 6 days) ***Contagious***	The scabs begin to fall off, leaving marks on the skin that eventually become pitted **scars**. Most scabs will have fallen off three weeks after the rash appears. The person is contagious to others until all of the scabs have fallen off.
Scabs resolved ***Not contagious***	Scabs have fallen off. Person is no longer contagious.

** Smallpox may be contagious during the prodrome phase, but is most infectious during the first 7 to 10 days following rash onset.*

Continued on page 5

Continued from page 4

How is smallpox spread?

In most cases, smallpox is spread from one person to another by face-to-face contact for several hours. Smallpox also can be spread through direct contact with infected bodily fluids or contaminated objects such as bedding or clothing. Humans are the only natural hosts of variola. Smallpox is not known to be transmitted by insects and animals. During close contact, a "healthy" person can breathe respiratory droplets from a sick person. The person is most contagious with the onset of rash (prodrome phase) and remains contagious until the last smallpox scab falls off. Following exposure, the average incubation period is between 12 to 14 days, but can range from 7 to 17 days.

Is there any treatment for smallpox?

No proven treatment for smallpox currently exists. Patients with smallpox may feel better from therapy such as intravenous fluids, medicine to control fever or pain, and antibiotics for any secondary bacterial infections that may occur. Antibiotics are not effective in fighting off viruses. The majority of patients with smallpox recover, but death may occur in as many as three out of every 10 individuals who become sick with the disease (30%). Many smallpox survivors have permanent scars over large areas of their body, especially their face. Some are left blind.

There is an effective vaccine to prevent smallpox (see Vaccination). Vaccination within three days of exposure to smallpox will completely prevent or significantly modify smallpox in the vast majority of persons. If the vaccine is given four to five days after exposure, the vaccine will most likely offer some protection from the disease or lessen its severity.

Vaccination

What is the smallpox vaccine?

The smallpox vaccine helps the body develop immunity to smallpox. The vaccine is made from a virus called vaccinia which is a "pox"-type virus related to smallpox. The smallpox vaccine contains the "live" vaccinia virus-not dead virus like many other vaccines. For that reason, the vaccination site must be cared for carefully to prevent the virus from spreading. Also, the vaccine can have side effects (see below). The vaccine does not contain the smallpox virus and cannot give you smallpox.

How is the vaccine administered?

A two-pronged (bifurcated) needle is universally used along with a technique called multiple puncture vaccination in the deltoid site. Each bifurcated needle is sterile, individually wrapped and for single usage only. After vaccination, it is important to follow care instructions for the site of the vaccine. Because the virus is live, it can spread to other parts of the body, or to other people.

What are the adverse reactions or complications to smallpox vaccination?

Smallpox vaccination (vaccinia) is generally safe, effective and preventative against smallpox. However, in a number of individuals, smallpox vaccination can result in untoward effects and adverse reactions. Most are totally benign, but appear frightening in appearance. Some are serious, but treatable. A few, which rarely occur, are life threatening and can be fatal such as encephalitis which is a severe disease with a high mortality.

Who is at greatest risk of side effects of smallpox vaccination?

The overall risks of serious complications of smallpox vaccination occur more frequently in those receiving their first dose of vaccine, young children and those with certain conditions (see table on page 6). An estimated one to two deaths occur for every million persons vaccinated. One of the most frequent serious complications is encephalitis (brain inflammation), which occurs in about one in 300,000 children who are vaccinated, and one in 200,000 vaccinated adults.

Continued on page 6

Continued from page 5

Individuals who have any of the following conditions, or live with someone who does, should **NOT** get the smallpox vaccine **unless they have been exposed to the smallpox virus:**

Eczema or atopic dermatitis. (This is true even if the condition is not currently active, mild or experienced as a child).
Skin conditions such as burns, chickenpox, shingles, impetigo, herpes, severe acne, or psoriasis. (People with any of these conditions should not get the vaccine until they have completely healed).
Weakened immune system. (Cancer treatment, an organ transplant, HIV, or medications to treat autoimmune disorders and other illnesses can weaken the immune system).
Pregnancy or plans to become pregnant within one month of vaccination.
Are allergic to the vaccine or any of its ingredients.
Are younger than 12 months of age. However, the Advisory Committee on Immunization Practices (ACIP) advises against non-emergency use of smallpox vaccine in children younger than 18 years of age.
Have a moderate or severe short-term illness. (These people should wait until they are completely recovered to get the vaccine).
Are currently breastfeeding.

Again, people who have been directly exposed to the smallpox virus should get the vaccine, regardless of their health status.

If people got the vaccination in the past when it was used routinely, will they be immune?

Not necessarily. Routine vaccination against smallpox ended in 1972. The level of immunity, if any, among persons who were vaccinated before 1972 is uncertain; therefore, these persons are assumed to be susceptible. Most estimates suggest protection or immunity from the vaccination lasts 3 to 5 years. Because naturally occurring cases of smallpox have been absent from the world for over 30 years, the United States population is not immune. Immunity can be boosted effectively with a single revaccination. Prior infection with the disease grants lifelong immunity.

Should I get vaccinated against smallpox?

Vaccination is not recommended at this time and the vaccine is not available to the public. Routine smallpox vaccination was terminated in the United States in 1972 because the risk of complications outweighed the threat of the disease. In the absence of a confirmed case of smallpox anywhere in the world, there is no need for the general public to be vaccinated against smallpox. The CDC maintains an emergency supply of vaccine that can be released if necessary, since vaccination is still effective after exposure has occurred.

Continued on page 7

Continued from page 6

Prevention And Control Of Smallpox

What should people do if they suspect a person has smallpox?

Any suspected case(s) of smallpox should be immediately reported to your local health department, the City of Long Beach Department of Health and Human Services at (562) 570-4302 or call 911 in case of an emergency and follow the recommendations given. The local health jurisdiction is responsible for notifying the California Department of Health Services (DHS), the Federal Bureau of Investigation (FBI), and local law enforcement. The DHS will notify the Centers for Disease Control and Prevention (CDC).

How can the spread of smallpox be stopped after someone has developed it?

Patients with symptoms of smallpox are capable of spreading the virus. Controlled medical planning requires observing and isolating patients so that they will not continue to spread the virus. In addition, individuals who have come into close contact with smallpox patients should be vaccinated immediately and closely watched for symptoms of smallpox. Vaccination and observation of contacts and isolation of infected patients are the most effective strategies for stopping the spread of smallpox. ■

Should you need additional information regarding smallpox please log onto the CDC's website at www.cdc.gov. The CDC's public response hotlines are:

- English: (888) 246-2675
- Spanish: (888) 246-2857
- TTY: (866) 874-2646

Sources: The Center for Disease Control and Prevention
The California Department of Health Services
Kaiser Permanente
The World Health Organization

2525 Grand Avenue, Room 229
Long Beach, California 90815

PUBLIC HEALTH Bulletin
Department of Health and Human Services
HE0127-03

Attention Health Care Providers

The California Code of Regulations, Title 17, Section 2500, requires the report of communicable diseases and conditions. To report a case of a communicable disease, contact the City of Long Beach Department of Health and Human Services Epidemiology Program at (562) 570-4302 or by fax at (562) 570-4374.

Reportable Communicable Diseases

- Amebiasis ☎ ✉ FAX
- Anisakiasis ☎ ✉ FAX
- Anthrax ☎
- Babesiosis ☎ ✉ FAX
- Botulism ☎
- Brucellosis ☎
- Campylobacteriosis ☎ ✉ FAX
- Chancroid
- Chlamydial Infections
- Cholera ☎
- Ciguatera Fish Poisoning ☎
- Coccidioidomycosis
- Colorado Tick Fever ☎ ✉ FAX
- Conjunctivitis, Acute Infectious of the Newborn ☎ ✉ FAX
- Cryptosporidiosis ☎ ✉ FAX
- Cysticercosis
- Dengue ☎
- Diarrhea of the Newborn ☎ (Outbreaks)
- Diphtheria ☎
- Domoic Acid Poisoning ☎
- Echinococcosis
- Ehrlichiosis
- Encephalitis ☎ ✉ FAX
- Escherichia coli O157:H7 ☎
- Foodborne Disease ☎ ✉ FAX †
- Giardiasis
- Gonococcal Infections
- Haemophilus Influenzae ☎ ✉ FAX
- Hantavirus Infections ☎
- Hemolytic Uremic Syndrome ☎
- Hepatitis, Viral ☎ ✉ FAX
- HIV/AIDS ☎ ✉
- Kawasaki Syndrome
- Legionellosis
- Leprosy
- Leptospirosis
- Listeriosis ☎ ✉ FAX
- Lyme Disease
- Lymphocytic Choriomeningitis ☎ ✉ FAX
- Malaria ☎ ✉ FAX
- Measles ☎ ✉ FAX
- Meningitis ☎ ✉ FAX
- Meningococcal Infections ☎
- Mumps
- Non-Gonococcal Urethritis
- Paralytic Shellfish Poisoning ☎
- Pelvic Inflammatory Disease
- Pertussis (Whooping Cough) ☎ ✉ FAX
- Plague, Human or Animal ☎
- Poliomyelitis, Paralytic ☎ ✉ FAX
- Psittacosis ☎ ✉ FAX
- Q Fever ☎ ✉ FAX
- Rabies, Human or Animal ☎
- Relapsing Fever ☎ ✉ FAX
- Reye Syndrome
- Rheumatic Fever, Acute
- Rocky Mountain Spotted Fever
- Rubella
- Rubella Syndrome, Congenital
- Salmonellosis ☎ ✉ FAX
- Scombroid Fish Poisoning ☎
- Shigellosis ☎ ✉ FAX
- Smallpox (Variola) ☎
- Streptococcal Infections ☎ ✉ FAX (Outbreaks of Any Type and Individual Cases in Food Handlers and Dairy Workers Only)
- Swimmer's Itch ☎ ✉ FAX
- Syphilis ☎ ✉ FAX
- Tetanus
- Toxic Shock Syndrome
- Toxoplasmosis
- Trichinosis ☎ ✉ FAX
- Tuberculosis ☎ ✉ FAX
- Tularemia ☎
- Typhoid Fever ☎ ✉ FAX (Cases and Carriers)
- Typhus Fever
- Varicella (Deaths Only) ☎
- Vibrio Infections ☎ ✉ FAX
- Viral Hemorrhagic Fevers ☎
- Water-associated Disease ☎ ✉ FAX
- Yellow Fever ☎
- Yersiniosis ☎ ✉ FAX

OCCURRENCE of ANY UNUSUAL DISEASE ☎
OUTBREAKS of ANY DISEASE ☎

Reportable Noncommunicable Diseases/Conditions

- Alzheimer's Disease
- Cancer
- Disorders Characterized by Lapses of Consciousness

☎ ✉ FAX = Report by FAX, telephone, or mail within one (1) working day of identification.

† = Report immediately by telephone when two (2) or more cases or suspected cases of foodborne disease from separate households are suspected to have the same source of illness.

☎ = Report immediately by telephone.
All other diseases/conditions should be reported by FAX, telephone, or mail within seven (7) calendar days of identification.